

D520 Reviewer's Guide

Version 1 of 2

PLEASE NOTE PRODUCT SPECIFICATIONS ARE SUBJECT TO CHANGE BEFORE LAUNCH



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EXECUTIVE SUMMARY

The New Latitude D520 Essential Productivity, Exceptional Value

The Latitude D520 delivers exceptional value with some of the latest technologies and a generous set of features. The D520 offers the ease of manageability that the Latitude brand is known for: common peripherals, image stability, long lifecycles and managed transitions. The D520 balances capabilities for key industry trends such as 802.11n Wi-Fi and Microsoft® Windows Vista™ with some legacy attributes such as a standard aspect display and abundant ports.

RoadReady[™] Quality: A magnesium alloy frame and Dell's patented Strike Zone[™] technology deliver a rigid and durable system. Spill-resistant keyboard helps protect internal circuitry from accidental spills, and over 13,000 hours of rigorous testing during the development phase to ensure RoadReadiness.

Innovative Design: The D520 delivers the next generation of Intel technology with dual processor options. Dell's QuickSet™ software allows users to customize wireless, power and display settings. The D520 offers freedom to work where you want with outstanding power options like dual batteries and the Dell's Location Profiler for easy adapter and profile switching.

Smart Security: Integrated CompuTrace® BIOS tracking agent provides innovative lost notebook recovery solutions with optional CompuTrace software. The latest WPA2 & CCX compatibility enables the ability to deploy the level of network security you need.

Hyperconnect™: Dual-band capable Wi-Fi (802.11a/b/g) gives you access to private and public hotspots*. The 802.11n-ready design enables excellent wireless performance by supporting next generation Wi-Fi standard. The Bluetooth 2.0 option enables cable-free connections to personal devices and peripherals

Target Market

The Latitude D520 is designed for customers who need essential productivity features and Latitude manageability at an attractive price.

The D520 meets the needs of growing small to medium sized organizations focused on total cost of ownership with D-Family common peripherals, RoadReady quality and affordability.

The Latitude D520 is an excellent solution for customers who prefer standard aspect displays, and require ports such as serial, S-Video and IEEE-1394.

GET MORE OUT OF NOW.

^{*} Please refer to Important Information page 43 for details

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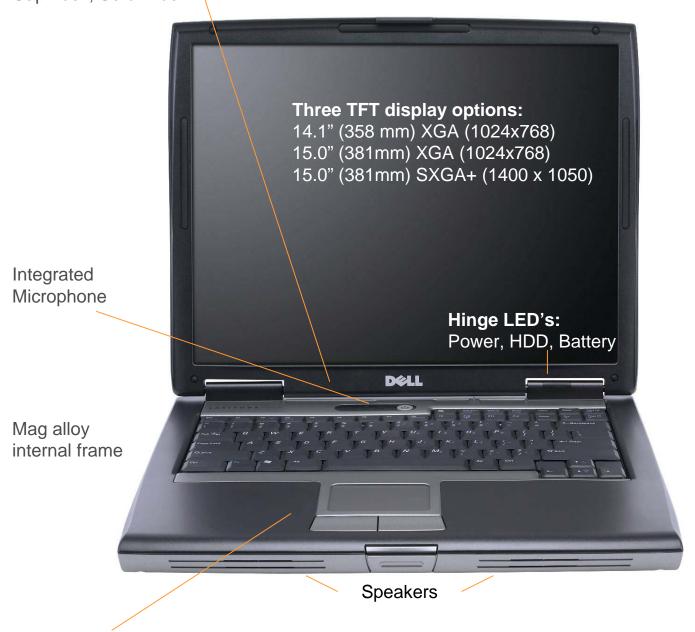
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PRODUCT OVERVIEW

Starting weight of 5.24 lbs (2.38kg) for the D520 is with a 14.1" XGA display, Intel GMA 950 graphics, Travel Lite module and 4-cell battery.*

Power Button and Dashboard LED's:

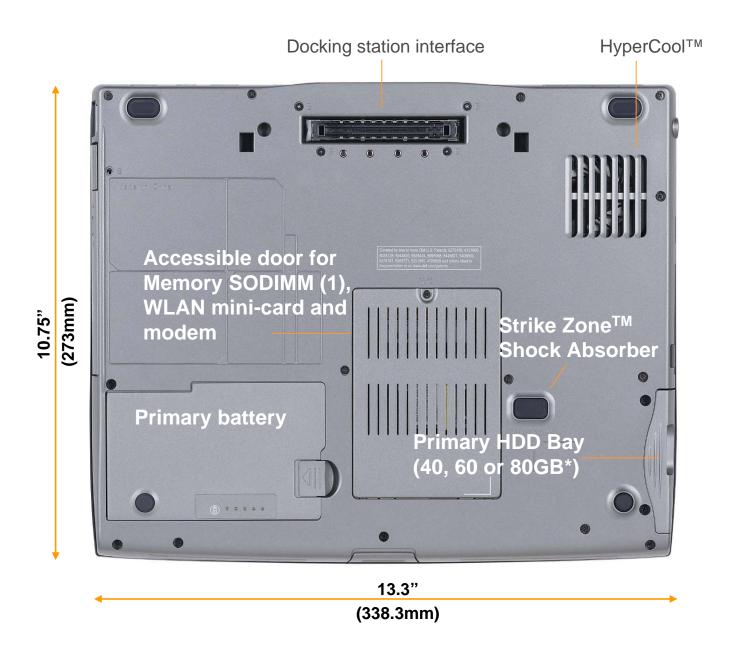
WLAN (WiFi), Bluetooth, Num Lock, Cap Lock, Scroll Lock



Dell Touchpad integrated pointing device with improved, quiet buttons



Bottom View



PRODUCT OVERVIEW



Depth: 10.75" (273mm)



Height: 1.41" (35.8mm)

Left



Rear

Width: 13.3" (338.3mm)



SPECIFICATIONS

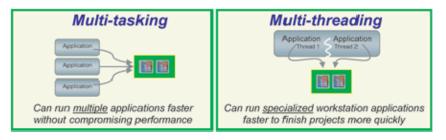
	Dell Latitude D520
Processor Type	Intel® Core™ Duo processors 667 MHz Front Side Bus & 2M Smart L2 Cache
	Intel® Celeron® M processors 533 MHz Front Side Bus & 1M L2 Cache
Operating Systems	Microsoft®Windows Vista™ Capable
	Microsoft Windows XP Professional SP2, Microsoft Windows XP Home SP2
Chipset	945GM or 940GML
Memory	Min. 256MB DDR2 shared*; 533 or 667MHz
	Max. 4GB* DDR2 shared* 533 or 667MHz with 945GM; or max. 2GB DDR2 shared* 533 or 667MHzwith 940GML
Displays	Standard aspect 14.1" XGA (1024 x 768 resolution), 15" XGA (1024 x 768 resolution) or 15" SXGA+ (1400 x
Graphics	1050 resolution) Intel® Graphics Media Accelerator 950 (Up to 128MB shared with 256MB system memory or up to 224MB shared
Oraphiles	with 512MB system memory)
Hard drives	40, 60, 80, 100GB*
Modular Media Bay	24X CD-ROM, 8X DVD-ROM*, 24X CDRVV/DVD, 8X DVD+/-RVV*, Floppy Disk Drive, Secondary 6-cell battery,
	80GB* Hard Drive or Travel Lite Module
Networking	56K* v.92 Internal Modern; 10/100 Ethernet LAN
WLAN	Intel® PRO///vireless 3945A/G (802.11a/g), Dell Wireless 1490 (802.11a/g), Dell Wireless 1390 (802.11g)
PAN	Dell Wireless 350 Bluetooth® internal wireless card
Audio	High Definition Audio codec speaker, 1.0W (4 ohms), integrated omni-directional microphone
PC Card	One Type I or Type II; Supports 34mm ExpressCard via USB interface through PCMCIA adapter
I/O Ports	Serial, IEEE-1394, docking connector, 4 USB, VGA, S-Video, headphone/speaker out, infrared port, RJ-11, RJ-45, AC power
Docking	D/Port, D/View Notebook Stand, D/Monitor Stand
Batteries	Primary 4-cell/32/VHr "Smart" Lithium Ion battery with external battery gauge
	Primary 6-cell/56/VHr "Smart" Lithium Ion battery with external battery gauge
	Secondary 6-cell/48/VHr "Smart" Lithium Ion battery with external battery gauge
Security	Physical: Steel-reinforced Cable Lock Slot, Media Module and Hard Drive locks
	System: Optional Smart Card reader via USB or PCMCIA; primary system, hard drive and administrator
	passwords Network: 802.11 WiFi Protected Access (WPA), 802.11i (WPA2), Virtual Private Networks (VPN) 802.1x with
	EAP modes and compatible CCX 4.0
Dimensions	H 35.8mm/l .4" x VV 338.3mm/l 3.3" x D 273mm/l 0.75"
Weight	Starting weight of 5.24 lbs (2.38kg) for the D520 is with a 14.1" XGA display, Intel GMA 950 graphics, Travel Lite
	module and 4-cell battery.* Storting a scient of 5.73 lbs (2.8kg) for the DS30 is with a 44.4" VC 0 display. Intel CM0.050 graphics. CDE00/DVD
	Starting weight of 5.73 lbs (2.6kg) for the D520 is with a 14.1" XGA display, Intel GMA 950 graphics, CDRW/DVD combo drive and 6-cell battery.*
Service & Support	I Year Next Business Day On-site Service*

NEW CORE ARCHITECTURE

The Latitude D520 can scale from affordable Intel Celeron® M processors to mainstream performance dual core architecture.

Intel® Core™: Dual Core with 667Mhz System Bus

 Dual Core Processors – Dual core processors can provide increased performance in Multi-Tasking environments and can enable increase performance for multi-threaded software applications. Since there are two separate processing cores, dual core processors can provide a performance increase over single core and HT enabled single core processors in Multi-Tasking or multi-threaded environments.



Dual-core processors are designed to provide the following benefits over single core include:

- Improved performance in complex application environments, completing more work per unit of time.
- 2) Separate applications, or threads, can split tasks across the two processor cores, meaning instructions can run concurrently to help complete projects faster.
- Latest micro-architecture Featuring 65nm architecture, a power optimized 667MHz processor system bus, aggressive clock gating & device sizing techniques designed for higher performance & lower power
- Power Managed cache up to 2MB Along with the enhanced Intel SpeedStep® Technology
 with multi voltage/operating points.
- Virus Protection When combined with Microsoft's latest OS (WinXP SP2), called Execute
 Disable Bit, can help prevent malicious code (viruses) from attacking your system.



NEW CORE ARCHITECTURE & GRAPHICS

Mobile Intel® 945GM/940GML Express Chipset

- Enhanced mobile capabilities optimized for dual core, 667MHz FSB allows for increased process system performance when compared with previous generation (945GM chipset only)
- High Memory Bandwidth DDR2-667 Dual Channel Memory
- Display Power Savings Technology 2.0 is designed to reduce display backlight power by up to 400mW with minimal visual impact.
- Microsoft Windows Vista[™] Capable with built-in LDDM driver support

The Latitude D520 will continue to offer the latest PCI-E architecture & DDR2 dual channel* memory introduced in the last generation of Dell Latitude notebooks.

PCI-Express (PCI-E) Technology

Serial I/O and Graphics Interconnect provide high performance (8GB/sec bandwidth) backwards compatibility with PCI implementation. PCI-Express is expected to keep pace with processor and I/O advances for the next 10 years or more so offers robust investment protection.

DDR2 – Dual Channel Capable Memory

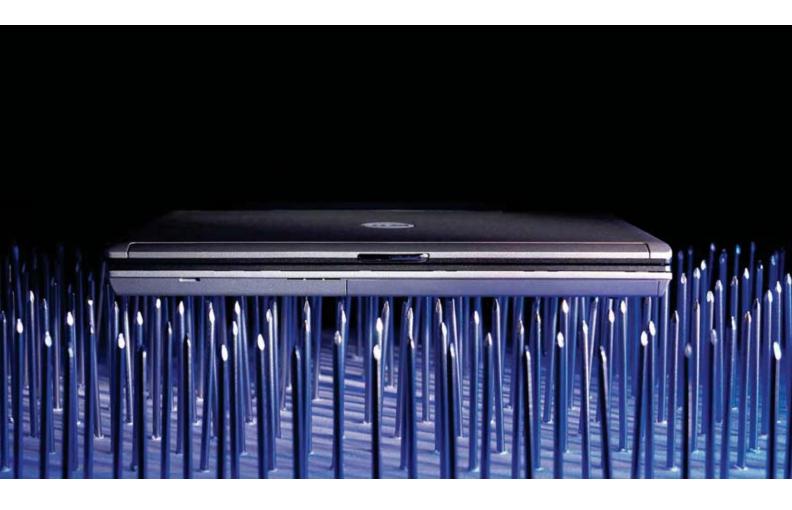
DDR2 offers Dual-Channel capability for additional bandwidth & performance, reduced power consumption and scalability to help increase performance with processor & chipset bus architecture.

Intel® Graphics Media Accelerator 950

- The Intel® 950 offers all the graphics performance and features business users need for the life of the system including:
 - Microsoft DirectX 9 acceleration
 - Dynamic Video Memory Technology (DVMT) for optimum memory use, wide screen display support, and dual independent displays for extended desktop
- Delivers support for key 3D features without the added costs or power of discrete graphics.
- Integrated graphics systems provides for low system costs, low power needs and low noise without sacrificing the performance business users need.



RoadReady™ Quality



Our new Dell Latitude notebooks are subjected to extensive shock and fatigue testing, destroying an average of 300 prototypes before the first new model ships. The result is an incredibly tough line of notebooks that features Mag-Alloy casings and a higher degree of durability that you can rely on, day in and day out.

- RoadReady™ Shock and fatigue testing subjects Latitude systems to conditions worse than they will likely encounter in everyday use
 - New tests, e.g., Dust resistance test, the Train Test (hinge stiffness)
 - New, tough specifications based on customer preferences e.g. keyboard and buttons, skin temperatures
 - 130K sq. ft. testing facility dedicated to ensuring high quality systems
- Designed to result in a highly reliable notebook

Environmental Exposure and Shock

- High/ Low temperature
- Humidity
- Altitude
- · Drop and shock
- Dust resistance
- Vibration
- Spill resistance
- · Packaging and bag testing

Voice of the Customer

- Surface temperature
- System acoustics
- Headphone acoustics
- · Base and LCD back rigidity
- · Keyboard deflection
- Button deflection
- Cable lock slot pull test

Conformance

- · Meet or exceed industry standards
- Safety (hi-potential, leakage, ESD)

Fatigue

- · Highly accelerated life testing
- LCD durability
 - Pogo (point pressure)
 - Screen marking resistance (weight and vibration)
- Base torsion
- LCD torsion
- Hinge cycling
- Latch cycling
- · Hinge stiffness, "The Train Test"
- Button cycling
- Connector cycling (e.g., HDD, slots, DC-in, ports, docking and module bay)
- · Power cycling and sequence test
- · Battery charge/discharge cycling

Performance benchmarking

- LCD performance
- System performance benchmarks
- Wireless performance
- Battery benchmarks
- Battery recharge times
- Please visit <u>www.dell.com/digitalvault</u> and select "Latitude Quality" video to see these tests in action



Designed by Customers, Built by Dell.

Beyond reliability, the third generation of D-family notebooks delivers new levels of user refinement. Details such as quiet operation and thoughtful port placement collectively add up to untroubled productivity.

>Stable Steel Hinges

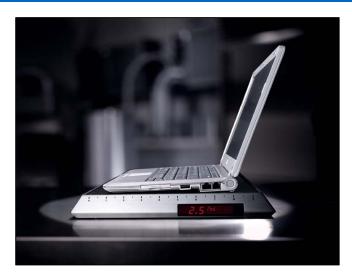
Dell Engineers created the hinge "Train Test" to assure that Latitude systems perform on the go.

➤ Hard Drive Protection

10% increase in HDD shock protection as a result of mechanical design improvements and increased reliability testing standards by supplier quality teams.

➤ Magnesium Alloy Internal Frame

The D520 features an internal magnesium alloy frame to help protect sensitive components inside.



Above: Latitude X1, weighing in at 2.5 lbs1

Right: Latitude D620

The latest D-family systems continue to reflect the sleek, professional lines first introduced in 2003. Aesthetic and functional improvements include the dark interior, the rigid feel of all magnesium alloy construction and distinctive profiles.



www.dell.com/roadready

1) X1 starting weight of 2.52 lbs (1.14kg) is with 12.1" display, and 3-cell (27W/hr) battery; Weights vary depending on configurations and manufacturing variability.



Dell's reputation for reliable, long-lived systems is no accident.

Quality management is in every aspect of Dell's product design and delivery.

➤ Dell-owned designs

Thousands of DellTM employees around the world design, develop and manage Dell LatitudeTM systems in order to assure the reliability and refinement customers expect.

A higher standard

Dell safety engineers demand above industry standard specifications in several areas for superior reliability, safety and performance.

>Attention to detail

Every part in a Dell notebook has been qualified for use in that system.

- -Reviewed for Dell specification conformance
- -Physically validated in prototype systems for performance
- -Strenuously tested for reliability and durability
- -Tested for OS, application and peripheral compatibility

Once qualified, any part level change is approved by Dell engineers.

≻Continuous improvement

Commodity-level quality metrics are reviewed weekly and teams dispatched to drive closure on every issue. Resulting product improvements are driven into existing and future system designs.

>World class supply chain management

Dell suppliers undergo rigorous selection processes, audits and reviews, and are held to more stringent quality goals each year.

> Manufacturing excellence

Dell's ISO 9001-certified facilities assemble Latitude systems. State of the art assembly and diagnostic processes add a layer of assurance for Dell customers.



Data Protection Strike Zone™

- To protect the hard drive and your data from the rough reality of mobile computing, Dell created Strike Zone™ shock absorber to control the shock measured at the hard drive when a system is shocked.
- Dell Strike Zone[™] has been designed to reduce acceleration input to a HDD over systems without the technology
- Strike Zone[™] offers HDD protection 24/7 whether the system is on, suspended, in hibernate mode, or turned off completely.
- 10% increase in HDD shock protection as a result of mechanical design improvements and increased reliability testing standards by supplier quality teams

Dell Patented Strike Zone™ Technology



Dell Latitude D610 shines in VeriTest Notebook Durability Study

In November, 2005, Dell Inc. commissioned VeriTestTM, the testing service of Lionbridge (Nasdaq: LIOX) to conduct a head-to-head durability benchmark study, featuring multiple drop tests, shock tests, a spill test and a dust test.

- ➤ DellTM LatitudeTM D610
- ➤ Acer TravelMate 4652
- ➤ HP Compaq nc6220
- ➤ LenovoTM ThinkPad T43

The full testing results, including a description of how the test was designed, can be found at http://www.veritest.com/clients/reports/dell/default.asp.

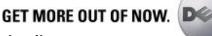
VeriTest Durability Study Results

	Dell	Acer	HP	Lenovo
Drop - 14"				0
Drop - 29"		0	0	0
Shock - 142g				
Shock - 162 g		\circ	0	
Spill Test				
Dust Test				
No Control Prof. of Nov. Supp.				

Both units passed, no errors

Both units passed, few errors

At least one unit failed or could not complete testing





Innovative Design



INNOVATIVE DESIGN: Batteries

The Latitude D520's long-lasting Lithium-Ion batteries and efficient ExpressCharge™* technology can help provide users with more up time and increased productivity.

Lithium-Ion - The Latitude D520 offers two primary and one secondary battery options:

- Primary:
 - 4-cell, 32 WHr "Smart" Lithium-Ion battery
 - 6-cell, 56 WHr "Smart" Lithium-Ion battery
- Secondary (in addition to Primary Battery):
 - 6-cell, 48 WHr Lithium Polymer battery
- Coin Cell Battery The Latitude D520 utilizes a coin cell battery to store system date and time when the system is shut down. For swapping batteries, the system should be placed in hibernate or suspend mode first.
- ExpressCharge^{TM*} Allows users to charge any of the D520 depleted batteries in approximately one hour with the computer turned off.
- **Battery Health Meter** Alerts you as battery charge declines so that you are advised of the relative health of your battery and when it may nearing the end of its effective life.
- **Charge Indicator** Dell batteries have an **LED indicator** that allows users to see how much run time and how much overall battery life are available at the touch of a button.
 - Press the status button on the battery charge indicator to illuminate the charge level lights –
 each light represents approximately 20% of total run time.
 - Press and hold the status button for 2 to 3 seconds to illuminate the overall battery life
 - If no lights illuminate- 80 to 100% battery life remains
 - Each illuminated light represents ~20% of battery life degradation
 - Recommend battery replacement when 4 lights are illuminated



D520 Benchmarks

VERSION 2 OF THE LATITUDE D520 REVIEWER'S GUIDE WILL INCLUDE BOTH BATTERY & PERFORAMNCE BENCHMARKS RESULTS. THESE WILL BE LEGALLY APPROVED AND AVAILABLE BEFORE RTS.



INNOVATIVE DESIGN: QuickSet

Dell QuickSet[™] software takes ease of mobility to the next level with fast, easy customization.

QuickSet Overview

QuickSet is a Dell-designed software user interface that enables customers to quickly update or change the settings on their D-Family Notebooks.

Upon launching the application from an icon in the system tray, the customer will see the screen below which is comprised of four main sections: **Wireless settings, Power management, Display settings and System information.**



Modular Installation

When installing QuickSet, customers may choose to select the modules they need. When deinstalling, customers also have the choice of removing only the modules they don't want. This flexibility is particularly useful to customers customizing QuickSet for use in their custom image.

The modules available for selection are:

- Power schemes:
- LOM Low Power
- Display scaling
- · Location Profiler
- Display Brightness
- WiFi Locator/Fn+F2 support



INNOVATIVE DESIGN: QuickSet

Wireless Settings

Location Profiler

■ Empowers the user to set Profile Settings such as printer, browser, VPN and network, as well as mobility settings for adapter and profile switching.



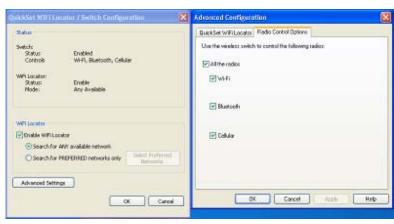
WiFi Locator

• Allows the user to specify what networks to search and configure preferred networks. Users can choose configuration settings for search and what bands to scan.





■ The user can also enable & disable any of the radios on their notebook.

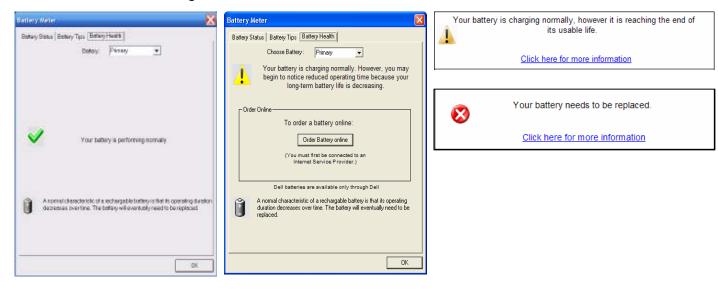




Power Management

Battery Health Meter

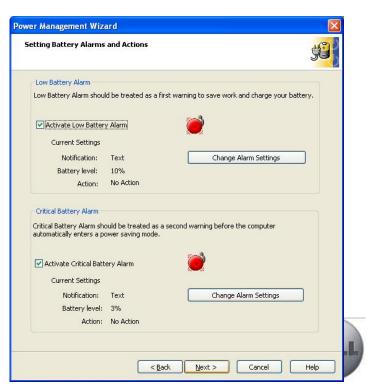
• Customers can view battery status, both remaining run time and battery health, by pressing Fn+F3. QuickSet will proactively warn users via pop-up message when the battery effectiveness is declining.



Power Wizard

■ Enables the customer to control power management via customized or predefined power schemes including power management settings for LCD brightness, wireless and LOM disablement when running on AC Power.





INNOVATIVE DESIGN: QuickSet

Display & System Information

Presentation Mode

- Presentation Mode offers users an easy way to configure their system for presentations and temporarily disable the power management settings; resulting in a seamless presentation experience
- When in presentation mode, all power management time-outs are temporarily disabled preventing interruptions to a presentation
- Users can seamless toggle between LCD and external devices without confusion or delay by using the Fn+F8 hot key; the graphical images below are displayed for easy selection.

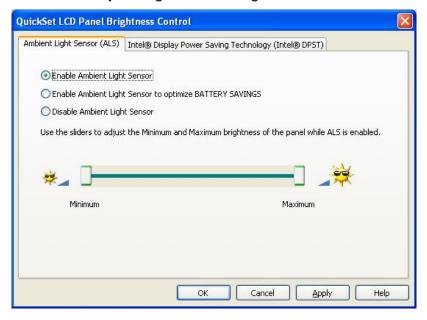


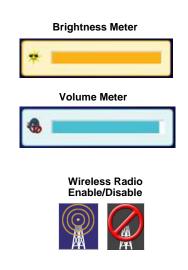




System Information

- QuickSet provides instant feedback on battery status and also volume, brightness, & wireless enable/disable graphical interfaces
- Users can adjust brightness settings





Icon & Font Scaling for High Resolution Panels

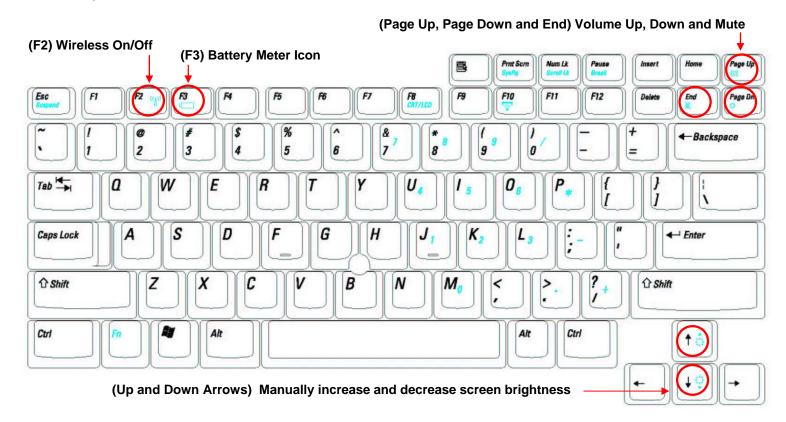
- Users with High Resolution Panels (SXGA+ & higher) can use QuickSet to quickly & easily re-size their Desktop fonts, icons and some application fonts allowing excellent viewing
 - Resizes fonts: Menu, title bar, caption buttons, status bar
 - Resizes Icons: Task tray, title bar, caption buttons
 - Resizes Scroll Bars: Menu bar & buttons, status, address, tool bar & tool tips, task bar & start button, Title Bar & Captions, message box and mouse pointer
 - Advanced Option for re-sizing applications. Size options include: Small-87.5%, Normal-100%, Large-113%, Very Large-150%

GET MORE OUT OF NOW. Deal

KEYBOARD FEATURES

Hot Keys

Latitude designs keyboards with easy access function keys to speed up common usage such as the battery meter, wireless on/off and volume controls.



Function Key Details

Feature	Hot Key	Function
Brightness Meter	<fn><arrow up=""></arrow></fn>	To increase brightness
	<fn><arrow down=""></arrow></fn>	To decrease brightness
Battery Meter	<fn><f3></f3></fn>	To display Battery Meter screen
Display Configuration Settings	<fn><f8></f8></fn>	Will list available display configurations
Power Management	<fn><f1></f1></fn>	Will put your computer into the hibernation state
	<fn><esc></esc></fn>	Activates a power management mode. You can reprogram this keyboard shortcut to activate a different power management mode using the Advanced tab in the Power Options Properties window.
CD Eject	<fn><f10></f10></fn>	Ejects optical drive
System Functions	<ctrl><shift><esc></esc></shift></ctrl>	Opens the Task Manager Window
	<fn><num lock=""></num></fn>	Enables and disables the scroll lock
Volume Meter	<page up=""></page>	Volume Up
	<page down=""></page>	Volume Down
	<end></end>	Mute On/Off

Numeric Keypad

The numeric keypad functions like the numeric keypad on an external keyboard. The keypad numbers and symbols are marked in blue on the right of the keypad keys. To type a number of symbols would down <Fn> and press the desired key. To enable/disable the keypad, press <Num Lk>.

Smart Security



Latitude's Smart Security offers a comprehensive but flexible security suite - allowing you to choose only the security solutions you need



Identity & Data Security





- Provide security in all four areas.
- Deal with expanding threats.
- One-size-fits-all doesn't fit everyone

With a robust & comprehensive security selection covering physical, user/data authentication & network security the D520 helps cover your security needs. These security hardware features are matched with a range of security software designed to meet the needs of client specific protection to enterprise wide security infrastructure; helping to ensure your mobile fleet is the strongest security link in your networked environment.

Dell provides best-of-breed physical access solutions

Physical Security Challenges	Physical Security Solutions
Theft Protection	Cable locks on notebook & docks: • The Latitude D520 includes a lock slot on the rear left side of the unit • When docked and in the locked position, a hook on the dock base extends into the slot opening, securing the notebook to the docking solution. • Hard Drive & Optical drive security screws available
Asset Monitoring	Configuration change alerts via Dell's Open Manage: • D/Dock media module & PCI cover latch with intrusion alert.
Lost Notebook recovery	Optional services provided by: Absolute Software's ComputracePlus & ComputraceComplete, STOP Security Plate: Super adhesive barcode sticker permanently tattoos notebook if removed

Latitude offers some of the latest Industry standard network security with added threat solutions for data integrity

Network Security Challenges	Dell Wireless Security Solutions
External & Internal Threats	Security management features help keep data secure: SSID/preferred network locking, MAC address filtering, VPN support 802.1x authentication helps keep unwanted users off your network: Port-based mutual authentication with support for PEAP, TLS, LEAP, EAP-FAST and other standard EAP methods.
	• Encryption can render your data unintelligible to prying eyes: Wi-Fi Protected Access (WPA) and 802.11i (WPA2) with hardware-based AES (Advanced Encryption Standard), provide a robust radio link encryption available, are standard in Dell products.
	• Interoperability for a complete enterprise solution: An early Cisco partner, all Dell wireless solutions are certified by the Cisco Compatible Extensions (CCX) program to be compatible with the latest Cisco hardware and software security standards.
Patch Management	Microsoft®, Altiris® & PatchLink™ Patch Management Software
Data Backup & Recovery	Altiris Local Recovery (free download) Local Recovery Pro and Enterprise Recovery Solution (available through S&P) offer local or enterprise image and data backup

Dell offers the latest industry leading Anti-Virus & Anti-Spyware

PC Threat Challenges	PC Threat Solutions Available through S&P
Virus	Optional PC Firewall & Anti-Virus software
Spyware & Spam	Optional Anti Spyware & Anti-Spam Software



$HyperConnect^{\mathsf{TM}}$



HyperConnect with Dell Latitude Notebooks

Connect simply, reliably and securely, everywhere you go. Dell notebooks integrate the newest generation of wireless technologies and services to make going wireless so effortless, we call it getting HyperConnected.*

Wi-Fi (Wireless LAN) Features

- The WI-Fi® solutions available on the Latitude D520 allow users to stay connected wirelessly at home, on the road or while roaming through any WLAN equipped building or campus*
- The Latitude D520 is wireless ready every notebook ships with an integrated dual band (2.4 & 5GHz) diversity antenna system and internal Wi-Fi 802.11 wireless LAN PCI Express Mini Card.
- The wireless card can be easily enabled/disabled by pressing the FN F2 key or in the BIOS setup
- Add or exchange the wireless card on your Latitude D520 by accessing the Mini Card slot via the access door on the bottom of the system.

Intel Centrino ™ Mobile Technology solutions

- The D520 features Intel® Centrino™ Mobile technology featuring the Intel Pro/Wireless 3945ABG 802.11a/g Mini Card, Intel® Core™ Processor and Intel 945GM chipset.
- Intel® Centrino[™] Mobile Technology delivers excellent wireless performance while enabling great notebook battery life

Dell Wireless LAN Solutions

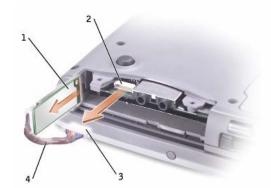
 The Latitude D520 also features a choice of Dell Wireless Wi-Fi solutions with the option of either the Dell Wireless 1390 802.11g Mini Card or the Dell Wireless 1490 802.11a/g dual-band Mini Card.



^{*} Please refer to Important Information page 43 for details

Integrated Dell Wireless 350 Bluetooth Wireless Solutions

- The D520 has the option of integrating the Dell 350 card, featuring the latest Bluetooth 2.0 technology with a throughput of 3Mbps.
 - Allows cable-free computing with Bluetooth enabled devices such as keyboards, mice,
 PDAs, headsets & mobile phones.
 - Can be added to any Latitude D520 via a connector within the hard drive compartment
 - Dell's Wi-Fi and Bluetooth solutions are designed to work together with minimal interference. The optional Dell Wireless 350 Bluetooth module incorporates it's own dedicated antenna and radio for optimal performance
 - A Bluetooth radio status indicator light is featured on the "dashboard" next to the power button for easy identification of Bluetooth status



- 1. Bluetooth card
- 2. System board connector
- 3. Bluetooth card connector
- 4. cable

Integrated Modem

- The Dell Latitude D520 features an integrated 56K* v.92 capable modem for convenience while traveling. The modem supports Wake-on-Ring for unattended telephony, fax access, and remote systems management.
- The RJ-11 port is located on the back side of the notebook



Integrated 10/100 LAN

- The Dell Latitude D520 features an integrated Broadcom 10/100 Ethernet chip that supports Wake-on-LAN from all power states (Off, Hibernate, and Standby) allowing remote systems management.
- The RJ-45 port is located on the back of the notebook.



D-Family Commonality





D-Family Expandability

PC Card Expansion

The Latitude D520 offers a single PC Card slot providing industry standard connectivity for portable communications, system expansion and increased storage. The slot will accommodate a Type I or Type II PC Card and is hot-swappable.

Media Modules

The Latitude D520 ships standard with a 24X variable speed CD ROM drive, other optional D-Family media modules include:

Lightweight travel module	Allows for minimum weight for those who want their notebook as light as possible
3.5" 1.44MB, removable floppy diskette drive	Still the most ubiquitous and inexpensive form of removable storage.
8X DVD-ROM*	For those longer flights when you need to watch movies and read CD & DVD data content
24X Combination DVD/CD-RW drive	Same functionality as the DVD-ROM, but adds the ability to burn data and music CDs. Great for sharing up to 700MB of data on inexpensive CDs
8X DVD+/-RW*	The drive that does it all. Watch movies, read data from CD or DVD, and burn CDs and DVDs.
Secondary 6-cell/48 WHr "Smart" Li- Polymer battery	For those that don't need to worry about being near a power outlet all day. Using a second battery gives you up to X hrs of battery life.
Secondary 80GB* hard drive	Great for data backups, sharing large data files, or just adding more storage.





- All modules can be used in conjunction with the floppy drive. This is accomplished by attaching the floppy drive through a USB port with an industry standard USB cable included with the system.
- D-Family media modules can also be used in the external D/Bay Module on the D/Port.

Hard Disk Drives

- The Dell Latitude D520 offers SATA hard drives that are available in 9.5mm form factors.
 - Standard Hard Drives: The entry-level capacity is 40 GB* with a 60 GB* and 80 GB* drive available as an optional upgrade.

Memory

The Dell Latitude D520 will offer users a choice of 533MHz or 667MHz DDR2 shared* system memory, with configurations up to 4GB*

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D-Family Operating Systems

- Microsoft will introduce the new Windows Vista[™] operating system in early 2007.
- The Latitude D520 is Microsoft Windows Vista capable.

Microsoft Windows Vista

- Enables a new level of confidence in your computer with security and reliability features.
 - Instant On/Off
 - Improved diagnostic instrumentation
 - User account protection
- Improves productivity and provides clear ways to easily organize, see and use your information.
 - Faster application loading with Superfetch feature (need minimum 1GB memory)
 - Better organization with virtual folders
 - Improved search and find
 - Fixed format documents
- Assists in seamlessly connecting you to people and devices.
 - Easy device synchronization with printers and cell phones
 - Support for advanced wireless links

Recommended configuration

- To run the Windows Vista operating system the D520 configuration should include:
 - Minimum 512MB memory to run a Basic user experience
 - Recommended 1GB dual channel memory to run advanced Aero user experience

New Latitude Carrying Cases

The D520 fits in two of the new D-Family cases with top loading designs that help to make sure access is quick and easy.



Deluxe Nylon Carrying Case - Our largest case, plenty of storage for business trips

Weight: 3.17 lbs/1.4 kg

Dimensions: 17.5 x 13 x 4.75 inches, 44 x 33 x 12 cm



Corporate Backpack – Great for mobility and convenience. Plenty of storage pockets and space

Weight 2.9 lbs/1.35 kg

Dimensions: 14 x 18 x 7 inches, 36 x 46 x 18 cm

D-Family Docking Solutions

The Latitude D520 is compatible with the Latitude Docking products including the D/Port Advanced Port Replicator, D-View and D-Family Monitor Stand.

D/Port Advanced Port Replicator

The D/Port allows you to maximize your work space while expanding your desktop. It provides convenient cable management and alleviates the need to re-connect peripherals each time you return to your desk. One simple connection provides access to 15 expansion ports including: VGA, DVI, S-Video, Parallel, Serial, PS/2 (x2), Headphone, S/PDIF, USB 2.0 (x4), RJ-11, RJ-45 and D/Bay Connector for utilizing external D-Family media modules.



D/Port Features & Benefits

- Convenient User Interface buttons to turn power on or off, undock and eject
- Supports pass-through connections for modem (RJ11) and network (RJ45)
- Provides multiple video ports: S-Video TV-out, Video, Digital Video Interface (DVI) for optimal flat panel use
- Dual Display Support via VGA and DVI ports
- Legacy port support: Parallel, Serial, PS/2 (x2)
- Two Audio Ports: S/PDIF & easy access Headphone jack
- Four USB 2.0 ports for use with additional peripherals
- Monitor Stand Connector
- D-Bay Connector for External Media Bay Module
- D/Port Power: External 90-watt a/c adapter compatible with all D-Family Notebooks
- Security with Easy-to-Use Cable Lock



D-Family Docking Solutions

D-Family Monitor Stand

For use with the D/Port, the D-Family Monitor stand offers a compact, space saving form factor with customizable D/Port docking positions. Two easy access buttons, with status indicator LEDs, are provided for powering the system on or off and for making undock request for Undock & Go™. Activity lights for the system hard drive and eject status are also provided. The sleek, open side design allows convenient access to media bays and frequently used ports on your notebook.

- Compact Space Saving Form Factor
- Customizable
 - Use with D/Port or as a "stand alone" monitor stand
 - 5 selectable docking positions to choose from
 - · Accessible open side design allows easy access to media bays and ports



The Latitude D/View notebook stand, in combination with the D/Port, allows you to view your system at a whole new level by elevating the notebook's LCD to a comfortable viewing position - replacing the need for a costly external display. This sleek, all-in-one solution was designed to allow you to reduce desktop space. The D/View's convenient cable management channel is ideal for use with your full-sized keyboard and mouse in addition to all of your other essential peripherals via the 15 ports available on the D/Port.

- Cost Saving
 - No external monitor needed
 - No monitor stand needed
 - More energy efficient than CRT monitors
- Easy Viewing
 - Adjustable to proper and desired height/distance for display
 - Use full size external keyboard and mouse
- Space Saving
 - Convenient cable management
 - Requires approximately 40% less desktop space than APR with 17" CRT



Driven by industry standards. Delivering cross-platform operability

An essential component of Dell's Scalable Enterprise strategy, OpenManage for client management is built on industry standards and interoperates with leading enterprise management products. This helps preserve your existing IT investment and enables advanced systems management throughout the entire lifecycle of your hardware and software.

OpenManage client management products and services are designed to empower IT professionals with easy-to-use, flexible tools that can help automate both hardware and software management tasks, including: Deployment and migration

Basic Client Configuration

Dell Client Configuration Utility

- Deploy and migrate systems
- Collect hardware and software inventory
- Distribute software
- Move personal settings and preferences to new systems
- Assess the landscape of networked clients

Client Instrumentation

OpenManage Client Instrumentation

- Collect hardware inventory and configuration information
- Receive proactive notification of potential fault conditions
- Remotely perform BIOS updates on one system or a group of Dell systems

Basic Hardware Management OpenManage Client Connector

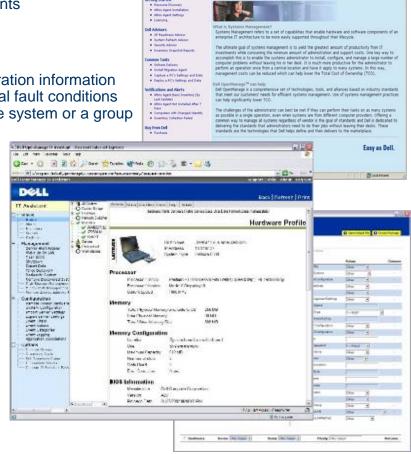
One-to-One Hardware Management

Workgroup Hardware Management OpenManage IT Assistant

- One-to-Many Hardware management
- Alerting, monitoring and configuration

Image & Data Backup/Restore Local Recovery

- Automatic, incremental backup
- One-button restore



Learn more about Dell OpenManage systems management solutions at:

www.dell.com/openmanage

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AMEGES (Falt

Dell ImageWatch™ is a flexible and easy to use tool that enables proactive transition management for Dell customers.

ImageWatch™ assists corporate customers with image-affecting technology transition management by proactively providing product introduction, end-of-life, and transition information for platforms, peripherals, and software.

Features

- Provides introduction through end-of-life information on Dell standard software and hardware components over a 6 month rolling window
- Includes transition information for all corporate product lines
 - OptiPLex Desktops
 - Latitude Notebooks
 - Dell Precision Workstations
 - PowerEdge Server Products
 - PowerVault Storage Products
- Information is configurable by the customer to only view products they are interested in
- Delivers information via Premier Pages
- Optional Email Notification informs customers when updates have been made to their selected product lines

Customer Benefits

- Provides additional level of image management through proactive notification of image affecting technology changes
- Provides a single point of contact for transition management and product line stability
- Allows access to information to plan and manage standards and manage change
- Provides IT departments with information to aid purchase and support decisions
- Helps manage TCO

Requirements

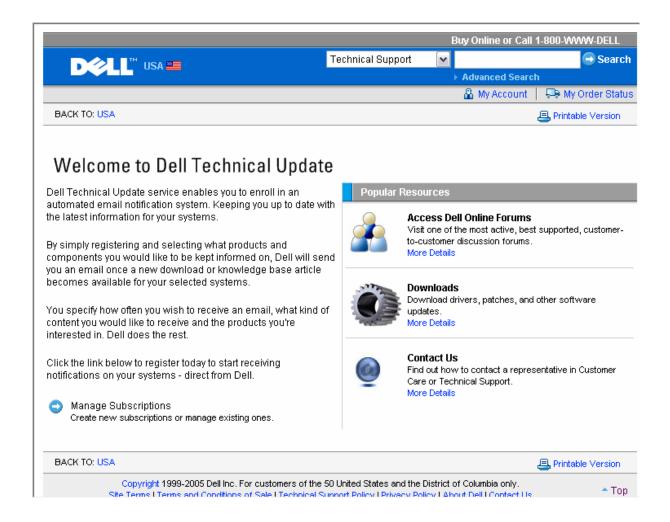
- ImageWatch includes extremely confidential information about Dell's and our suppliers' product plans. Therefore, only qualified customers may receive ImageWatch.
- To qualify for ImageWatch, a customer must:
 - Have a current, standard NDA on file with Dell
 - Sign a special NDA for ImageWatch
 - Have an active Premier Page
 - Have a strong, lasting relationship with Dell
 - Not be a Dell competitor or supplier, or a competitor to Dell's suppliers
 - Not pose a competitive risk in any way
 - Understand the scope and extreme confidentiality of ImageWatch



Dell Technical Update

Dell's new Technical Update provides proactive communication of changes to maintain health of the enterprise network.

- Simple online registration allows the customer to choose on what systems and devices they would like to receive the email notification.
- Links take customers directly to additional information and downloads they need.



Dell Services:

Factory Integration and Imaging Services

Good

Help speed up the deployment of your systems with Advanced Configuration Services*. This simple and convenient songice lets you configure.

service lets you configure online the BIOS settings, OS components and hard drive partitions for the systems you are ordering.

*Available 5/22/06



A new and more flexible way of customizing your system. ImageExpress** is an online portal that is designed to enable you to develop, import, edit, manage, test, and quickly deploy your corporate images on any new Dell client system.

**Available 9/16/06



Flexible factory capabilites.

Custom Factory
Integration (CFI) helps
reduce deployment hassles
and costs by having
hardware, images,
applications, and peripherals,
integrated with your systems,
as they're being built

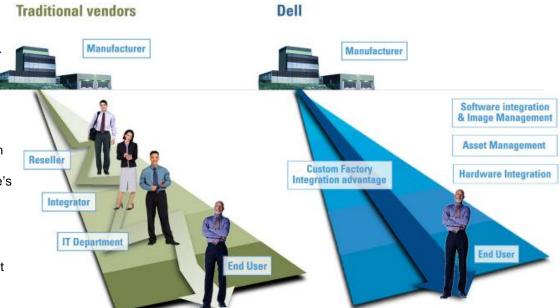


Dell's Managed

Deployment Services
help you manage costs
and improve efficiencies
when refreshing your
client infrastructure by
providing comprehensive
and customizable
deployment services along
with a single-point-ofcontact.

Benefits of Dell's Custom Factory Integration Service

- Accountability: One source.
 One provider. Dell provides a single point of accountability for computer procurement and customization.
- Quality: Because Dell integrates your customization into the mainstream manufacturing process, there's a reduced chance of error.
- Consistency: ISO 9002 factory processes provides high quality "configure-toorder" capability that makes it possible to customize a handful to hundreds of systems at once.



- Frees up IT Resources: Dell can ship systems that are fully customized and ready to deploy into your production environment. This frees your internal staff to focus on more strategic initiatives.
- **Global Solutions**: Virtually all of our core capabilities are duplicated in Dell's ISO-9002-certified factories around the world. This helps ensure a globally consistent deployment of enterprise solutions.
- Stable Image Assurance Program (SIAP): SIAP is designed to enable you to qualify and deploy a single hard drive image without worrying about the cost and inconvenience associated with required hard drive image changes. Dell will notify you and proactively update your image when industry hardware component changes require driver updates.

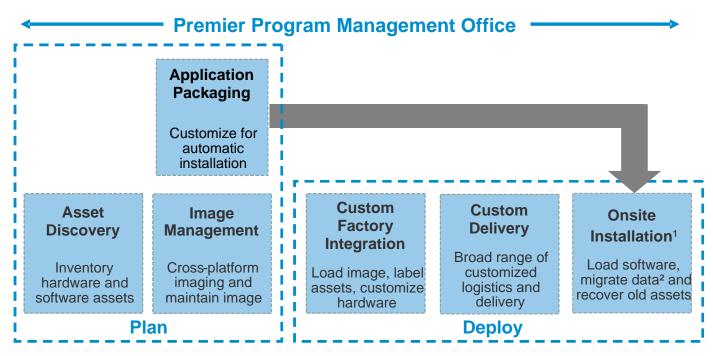


Managed Deployment Services

Dell capabilities can be purchased modularly or end-to-end to supplement your internal resources. Our comprehensive deployment services make it easier for you to refresh and manage your client environment

BENEFITS TO YOU

- Exceptional Execution Dell delivers execution without excuses. We identify best
 practices that can be applied to delivering services, make them repeatable and then add
 mass customization.
- Accountability Dell is your single point of contact so you don't have to aggregate solutions and synchronize execution from disparate vendors.
- **Focus** We offer a customer focused portfolio of services dedicated to IT infrastructure.
- Resource Optimization We can manage every step of the process so your IT staff can focus on other strategic initiatives.



¹ Service provides for basic system set up, connection of up to three external devices, set up of Internet service, data transfer, loading of 2 software CDs and e-mail and system basic overview, by trained technician. Does not cover repair services. Data migration service excludes transfer of data files over 2GB, operating systems, and application files. Software loading requires the Customer to supply the CD and any required licenses. Service may be provided by third party. See dell.com/servicecontracts for details. Availability varies. Other conditions apply. Please see your contract with the service provider for other important details.

² Data migration service excludes transfer of operating systems and applications. Dell makes no recommendations regarding customer's security needs. It is the customer's responsibility to protect any confidential or sensitive information contained on its hard drives recovered by Dell. Other conditions apply. New computer must have a disk drive that is 1.6 times larger in capacity than the old computer. PC99 compliance means that the computer must have a compact disc drive, universal serial bus interface, a local network interface and be network bootable. Weekend service subject to customer's availability, inclement weather and other events outside of our control.



Dell Services:

Asset Recovery/Recycling & Client Support

Client Support Services

Dell Client Support Services can provide your IT staff and end-users with the productivity and response levels they need to get the "full-value" from their investments.

Call Support

Dell on Call^{™ 3} "Issue Management"

Gold Technical Support "Expert Response" Basic Support "The Foundation"

Investment Protection
CompleteCare™
Accidental Damage Service⁴
"Help Protect"

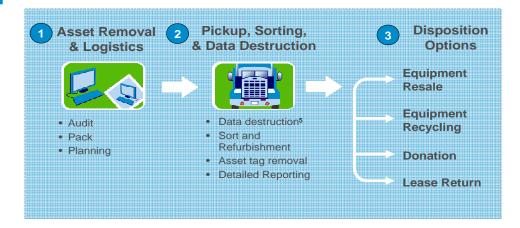


Delivered with the quality you expect from Dell

- Confidence in our expertise and ability to identify and resolve your issues quickly
- Flexibility to customize support to match your needs and budget
- Dedicated and accountable technicians committed to customer satisfaction
- Peace of mind that your notebooks can be protected in a variety of situations

Asset Recovery and Recycling Services

Dell provides the logistic and disposal capabilities for a secure and environmentally safe way to recover and dispose of owned and/or leased computer equipment



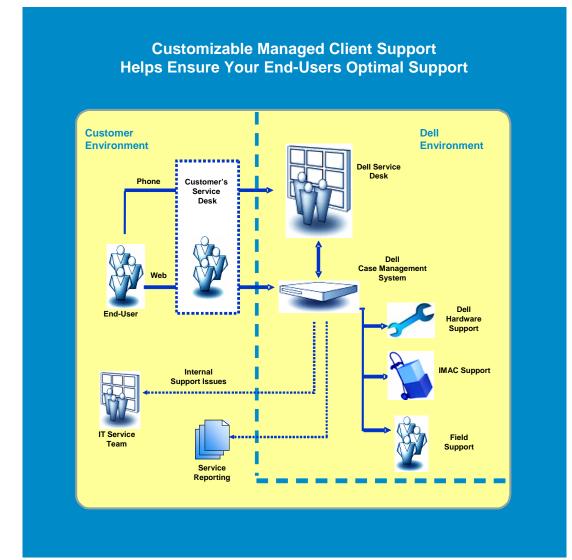
³ Dell on Call Phone Support Service: To view important service information including a list of Supported Products and Issues, see www.dell.com/smb/delloncall. Please note that Supported Products or Issues may change at any time without notice to Customers. Phone based troubleshooting and how-to questions only; onsite assistance, repair services or parts not covered.

⁵ No data removal process leaves a hard drive or computer as free from residual data as a new product. Dell makes no recommendations regarding the customer's security needs or representations regarding the effectiveness of one method of data removal over another. It is the customer's responsibility to protect any confidential or sensitive information contained on hard drives recovered by Dell.



⁴ CompleteCare Accidental Damage Service service excludes theft, loss, and damage due to fire, flood or other acts of nature, or intentional damage. CompleteCare not available in all states. Customer may be required to return unit to Dell. For complete details, visit www.dell.com/servicecontracts.

Managed Lifecycle Services Dell Managed Lifecycle Services help you better manage costs and improve efficiencies by providing a range of system deployment and technical support services that can be customized to meet your business and operational needs.



Available services

Choose only the services you need to supplement your IT staff:

- Custom support levels
- Gold Technical Support
- Dell support of customer's service desk
- Dell service desk
- CompleteCare[™]
 Accidental Damage
 Service⁴
- Printer support
- Depot repair services
- Password management
- Install, move, add, change equipment
- Remote support

⁴ CompleteCare Accidental Damage Service service excludes theft, loss, and damage due to fire, flood or other acts of nature, or intentional damage. CompleteCare not available in all states. Customer may be required to return unit to Dell. For complete details, visit www.dell.com/servicecontracts.

DELL'S ENVIRONMENTAL RESPONSIBILITY

Dell's business continues to expand around the world and we recognize the growing responsibilities of managing our environmental impacts accordingly. Our global environmental policy provides a comprehensive framework that is designed to ensure sustainable practices throughout the entire life cycle of the product. Dell is driving environmental innovations with Latitude Notebooks that your organization can benefit from. Dell encourages you to take advantage of these environmental features when making purchasing decisions. Throughout the purchasing process, we make it easy for you to choose product environmental options and recycling services.



Product Concept and Design - with Environment in Mind

Dell's focus on improving environmental performance starts with our Design for the Environment (DfE) approach. When designing new systems, engineers consider environmental factors such as material composition of components, amount of materials used, energy efficiency as well as design attributes that aid in recycling.

Recycling Options Available Online

- Value Recovery Customers choose this option when they believe their used equipment has some remaining value. The value gained from the sale of the used equipment can be returned to customer.
- Recycling Customers choose this option when they want their used equipment to be recycled, or when the used equipment has no resale value.

Restricted Materials

Dell avoids the use of environmentally sensitive materials whenever possible. Materials such as heavy metals and plastics containing halogenated flame retardants can pose potential environmental hazards. The emphasis of Dell's Restricted Materials Program is not only to be in compliance with existing and/or upcoming legal requirements—such as the European Union's Restrictions on Hazardous Substances (RoHS) directive—but also to meet customer requirements to eliminate or minimize the use of certain substances in our products and to design products that are easily recyclable. Dell's goal is to comply with the RoHS Directive requirements prior to the July 2006 EU implementation deadline and to continue to incorporate these changes in our global product lines. Dell will continue to launch lead-free/RoHS compliant Latitude systems in early 2006 in advance of the EU RoHS deadline.

Efficient Use of Materials

Dell endorses the efficient use of materials. Dell's packaging engineers have been successful in minimizing the amount of packaging materials used for shipping PCs and have established aggressive goals to avoid 43,000 tons of product packaging and shipping materials between FY2004 and FY2008. These goals will be achieved through slip sheets, box eliminations and alternative material projects on our server, notebook and desktop lines, as well as inbound packaging improvements.

Media Reduction Initiatives

- Helps reduce the number of printed documents and CDs (drivers and utilities) that are shipped with systems to help reduce cost with the savings passed on to the customer and to lessen the environmental footprint of our products by eliminating potential waste.
- PC Restore is an application that saves customers significant time and simplifies the technical process of reinstalling an operating system (OS) when a problem occurs. The OS reinstall with Dell PC Restore functions in less than 10 minutes versus up to 3 hours and multiple technical support calls at least 18 times faster!



IMPORTANT INFORMATION

Wireless Access

Where wireless access is available. Additional access charges apply in some locations.

On Site Service

Service may be provided by third-party. Technician will be dispatched if necessary following phone-based troubleshooting. Subject to parts availability, geographical restrictions and terms of service contract. Service timing dependent upon time of day call placed to Dell. U.S. only.

Limited Warranty

For a copy of our guarantees or limited warranties, please write Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682. For more information, visit www.dell.com/warranty."

Memory

Up to 224 MB of system memory may be allocated to support graphics, depending on system memory size and other factors.

4GB or Greater System Memory Capability

The total amount of usable memory available will be less depending on the actual system configuration.

Dual-channel memory

Dual-channel memory requires 2 each of the same capacity memory DIMMs.

DVD-ROM

DVD-ROM drives may have write-capable hardware that has been disabled via firmware modifications.

Modem Speed

Modem download speeds are limited to 53Kbps. Upload speeds are less (about 30Kbps). Speeds can vary by line condition and modem manufacturer. Analog phone line and service required.

Notebook Weight

Starting weight of 5.24 lbs (2.38kg) for the D520 is with a 14.1" XGA display, Intel GMA 950 graphics, Travel Lite module and 4-cell battery. Weights vary depending on configurations and manufacturing variability.

Dell's Guarantees/Warranties

For a copy of Dell's guarantees or limited warranties, please write Dell USA L.P., Attn: Warranties, One Dell Way, Round Rock, TX 78682. For more information, visit www.dell.com/us/en/gen/service_service_plans.htm.

Hard Drive Size

For hard drives, GB means 1 billion bytes and TB equals 1 trillion bytes; actual capacity varies with preloaded material and operating environment and will be less.

Battery Charge Times

Full charge time is based on 80% capacity (when the battery 5th LED charge light turns on). ExpressCharge battery charge time of approximately 60 minutes is measured from 0% to 80% capacity for both the 4-cell and the 6-cell battery. 100% charge capacity is reached in approximately 2 hours 4 minutes for the 6-Cell battery and approximately 1 hour 49 minutes for the 4-cell battery.

DVD+/-RW Drives

Discs burned with this drive may not be compatible with some existing drives and players; using DVD+R media provides maximum compatibility.

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Return Information

Dell Inc. provides this equipment for evaluation purposes only. All equipment must be returned to Dell Inc. in good working condition. Equipment must be in its original box, including all packaging, documentation, cables, and diskettes.

This equipment remains the property of Dell Inc. unless paid for in full by the evaluator. Dell Inc. reserves the right to collect from the evaluator the full retail value of the equipment if not returned promptly and in good working condition on or before the due date.

Please return system to:

Dell, Inc.
SPA Lab MS PS3-6526
One Dell Way
Round Rock, TX 78682